

Department of Biology

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Dr. Kiyozo Asada
Biotechnology Research Laboratories
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Dear Kiyozo:

We are still very actively pursuing the purification of the enzyme system in Pyrococcus furiosus which is able to degrade the hydrolytic product of mustard gas. Getting rid of the many tons of this material is of great interest to the Army here in the United States as well as in Russia and in other countries where large stocks are stored underground. As the enclosed short description of our project points out the usual techniques of incineration can probably not be used for environmental reasons. I am writing to ask you if Takara Shuzo is still interested in helping support our work in return for an eventual joint patent that could be taken out on either large quantities of the purified enzyme or, more optimistically, on enzyme that has been immobilized to permit on line passage at 100° of the thiodiglycol. Let me know if Takara would be willing to help support our work to the extent of say \$50,000.00.

Incidentally, we are still very interested in carrying out crystallography on the Pyrococcus amylase from which the cloned E. coli cells produce the enzyme. I would appreciate hearing from you about the possibilities of getting 100 to 200 mg of the enzyme (which we could bring to ultimate purity in our laboratories here). This would be sufficient for comparing crystals to be examined by my colleague, Evangelos Moudrianakis.

Best Regards,



Chris Anfinsen

